

# REPORT ON ELECTRIC LIGHTING INSTALLATION. No. 4389

Port of PHILADELPHIA Date of First Survey APR. 24<sup>th</sup> Date of Last Survey MAY 19<sup>th</sup> No. of Visits 3  
 No. in Reg. Book on the Iron or Steel WOOD TUG "LADY CORDEAUX" Port belonging to NASSAU  
 Built at MILFORD, DEL. By whom VINYARD S. B. CO. When built 1922  
 Owners COLONIAL GOVT. OF THE BAHAMAS. Owners' Address  
 Yard No. 60. Electric Light Installation fitted by VINYARD S. B. CO. When fitted 1922.

## DESCRIPTION OF DYNAMO, ENGINE, ETC.

ONE STEAM DRIVEN ENGBERG 4 K.W. 110 VOLT GENERATOR.

Capacity of Dynamo 4 K.W. 37 Amperes at 110 Volts, whether continuous or alternating current CONTINUOUS.  
 Where is Dynamo fixed ENGINE ROOM, UPPER DECK. Whether single or double wire system is used DOUBLE  
 Position of Main Switch Board ENGINE ROOM. having switches to groups A. B. C. D. E. F. of lights, &c., as below  
 Positions of auxiliary switch boards and numbers of switches on each NO AUX. SWITCHBOARDS.

If fuses are fitted on main switch board to the cables of main circuit YES. and on each auxiliary switch board to the cables of auxiliary circuits — and at each position where a cable is branched or reduced in size YES. and to each lamp circuit YES.

If vessel is wired on the double wire system are fuses fitted to both flow and return wires or cables of all circuits including lamp circuits YES.

Are the fuses of non-oxidizable metal YES. and constructed to fuse at an excess of 25 per cent over the normal current

Are all fuses fitted in easily accessible positions YES. Are the fuses of standard dimensions YES. If wire fuses are used

are permanent instructions fitted on or near each switch board giving particulars of proper size of fuse for each circuit NO WIRE FUSES.

Are all switches and fuses constructed of incombustible materials and fitted on incombustible bases YES.

Total number of lights provided for 52 arranged in the following groups:—

A <u>ENG. ROOM.</u>	<u>12</u> lights each of <u>40 WATTS.</u>	candle power requiring a total current of <u>4.32</u> Amperes
B <u>MN. DK. HD. FORD.</u>	<u>10</u> lights each of <u>40</u> "	candle power requiring a total current of <u>3.6</u> Amperes
C " " <u>AFT.</u>	<u>7</u> lights each of <u>40</u> "	candle power requiring a total current of <u>2.52</u> Amperes
D <u>DECK LIGHTS.</u>	<u>12</u> lights each of <u>40</u> "	candle power requiring a total current of <u>4.32</u> Amperes
E <u>UPPER DK. HD.</u>	<u>13</u> lights each of <u>40</u> "	candle power requiring a total current of <u>4.68</u> Amperes
<u>THREE</u> Mast head lights with <u>ONE</u> lamp each of <u>40</u> "	candle power requiring a total current of <u>1.08</u> Amperes	
<u>TWO</u> Side light with <u>ONE</u> lamp each of <u>40</u> "	candle power requiring a total current of <u>.72</u> Amperes	
<u>BINKALE</u> Cargo lights of <u>—</u>	candle power, whether incandescent or arc lights <u>—</u>	

If arc lights, what protection is provided against fire, sparks, &c. ONE SEARCH LIGHT, METAL CASE.

Where are the switches controlling the masthead and side lights placed TWO IN PILOT HOUSE FOR MASTHEAD, SIDELIGHTS AT SWITCHBOARD.

## DESCRIPTION OF CABLES.

Main cable carrying 37 Amperes, comprised of 7 wires, each 16 S.W.G. diameter, (NO. 6, STRANDED) square inches total sectional area  
 Branch cables carrying — Amperes, comprised of — wires, each — S.W.G. diameter, square inches total sectional area  
 Branch cables carrying — Amperes, comprised of — wires, each — S.W.G. diameter, square inches total sectional area  
 Leads to lamps carrying — Amperes, comprised of — wires, each — S.W.G. diameter, square inches total sectional area  
 Cargo light cables carrying — Amperes, comprised of — wires, each — S.W.G. diameter, square inches total sectional area

## DESCRIPTION OF INSULATION, PROTECTION, ETC.

DOUBLE BRAIDED RUBBER COVERED COPPER WIRE IN GALV. STEEL CONDUITS.

Joints in cables, how made, insulated, and protected W.P. JUNCTION BOXES.

Are all the joints of cables thoroughly soldered, and the flux used not containing acids or other corrosive substances YES. Are all joints in accessible positions, none being made in bunkers, cargo spaces, or spaces which may at any time be used for carrying cargo, stores, or baggage YES.

Are there any joints in or branches from the cable leading from dynamo to main switch board NO.

How are the cables led through the ship, and how protected GALV. STEEL CONDUITS.

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**DESCRIPTION OF INSULATION, PROTECTION, ETC.—continued.**

Are they in places always accessible **YES.**

What special protection has been provided for the cables in open alleyways or where exposed to weather or moisture **CONDUITS W.T.**

**JUNCTION BOXES.**

What special protection has been provided for the cables near galleys or oil lamps or other sources of heat **CONDUITS.**

What special protection has been provided for the cables near boiler casings **CONDUITS.**

What special protection has been provided for the cables in engine room **CONDUITS.**

How are cables carried through beams — through bulkheads, &c. **W.T. CONDUITS & LOCK NUTS.**

How are cables carried through decks **W.T. CONDUITS & LOCK NUTS.**

Are any cables run through coal bunkers **NO** or cargo spaces **YES.** or spaces which may be used for carrying cargo, stores, or baggage **YES.**

If so, how are they protected **CONDUITS.**

Are any lamps fitted in coal bunkers or spaces which may at times be used for cargo, coals, or baggage **NO. TWO IN CARGO HOLD**

If so, how are the lamp fittings and cable terminals specially protected **VAPOUR-PROOF GLOBES & METAL GUARDS.**

Where are the main switches and fuses for these lights fitted **ENGINE ROOM.**

If in the spaces, how are they specially protected —

Are any switches or fuses fitted in bunkers **NO.**

Cargo light cables, whether portable or permanently fixed ~~W.T. CONDUITS~~ **FIXED** How fixed **IN CONDUITS. ONE PORTABLE LIGHT FOR USE ON DECK. 40 WATT.**

In vessels fitted on the single wire system, how is the dynamo terminal fixed to the hull of vessel —

How are the returns from the lamps connected to the hull —

Are all the joints with the hull in accessible positions —

Is the installation supplied with a rollmeter **YES.** and with an amperemeter **YES.** fixed **ON MAIN SWITCHES.**

**VESSELS BUILT FOR CARRYING PETROLEUM.**

In vessels built for carrying petroleum, are all switches and fuses fitted in positions not liable to the accumulation of petroleum vapour or gas —

Are any switches, fuses, or joints of cables fitted in the pump room or companion —

How are the lamps specially protected in places liable to the accumulation of vapour or gas —

The copper used is guaranteed to have a conductivity of not less than that of the Engineering Standards Committee's standard, and the wires are protected by tinning from the sulphur compounds present in the insulating material.

Insulation of cables is guaranteed to have a resistance of not less than **600** megohms per statute mile at 60° Fahrenheit after 24 hours' immersion in water, the test being made after one minute's electrification at not less than 500 volts and while the cable is still immersed. **(UNDERWRITER'S STANDARD)**

The foregoing statements are a correct description of the Electric Light installation fitted by us on this vessel and we declare that it is at this date in good order and safe working condition.

*Louis H. Prycher*

Electrical Engineers

Date **MAY 19<sup>th</sup> 1922.**

**COMPASSES.**

Distance between dynamo or electric motors and standard compass **NO STANDARD COMPASS.**

Distance between dynamo or electric motors and steering compass **40 FT.**

The nearest cables to the compasses are as follows:—

A cable carrying <b>SEARCH LST.</b> Amperes —	feet from standard compass	<b>3'-10"</b>	feet from steering compass
A cable carrying <b>MAST HEAD LST.</b> Amperes —	feet from standard compass	<b>3'-6"</b>	feet from steering compass
A cable carrying <b>DECK HD: FORD: UPPER ON HOME.</b> Amperes —	feet from standard compass	<b>19'</b>	feet from steering compass
		<b>8'</b>	

Have the compasses been adjusted with and without the electric installation at work at full power **YES.**

The maximum deviation due to electric currents, etc., was found to be — degrees on — course in the case of the standard compass and — degrees on — course in the case of the steering compass.

*Vinyard Shipbuilding Company*  
*M.M. Vinyard*

Builder's Signature.

Date **MAY 19<sup>th</sup> 1922.**

**GENERAL REMARKS.**

**THE INSTALLATION HAS BEEN FITTED ON BOARD IN A SATISFACTORY MANNER, AND IN ACCORDANCE WITH THE RULES, IT WAS TRIED WITH ALL LIGHTS ON AND FOUND SATISFACTORY.**

*It is submitted that this vessel is eligible for THE RECORD.*

**FEE \$50.00** applied for **May 31<sup>st</sup> 1922**

*paid 3/6/22*

*J. Buchanan*  
*29/6/22*

Surveyor to Lloyd's Register of Shipping.

Committee's Minute **New York JUN 13 1922**

*Elect light*



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